

COMPLETE LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A circuit apparatus, comprising:

a laminar support having a thickness, an upper face and an opposed lower face;

a conductive track on the lower face of the laminar support, the conductive track having a conductive cross-section with an effective capacity to carry electrical power;

an auxiliary conductive element bonded to and electrically connected to the conductive track on the lower face of the laminar support to increase the conductive cross section of the conductive track and to thereby increase the effective capacity of the conductive track to carry electrical power,

an electrical component mounted on the upper face of the laminar support opposite the auxiliary conductive element, the electrical component electrically connected through the laminar support to the auxiliary conductive element on the lower face of the laminar support; and

wherein the auxiliary conductive element is applied by means of an apparatus for applying SMD components.

2. (currently amended) The apparatus of claim 1, wherein the auxiliary conductive element is bonded electrically connected to the laminar support by means of an adhesive and soldered thereto by a wave soldering procedure.

3. (currently amended) The apparatus of claim 1, wherein the auxiliary conductive element is bonded and electrically connected to the laminar support by means of a cream solder and a reflow soldering procedure.

4. (currently amended) The apparatus of claim 1, wherein ~~said laminar support includes a first face a second face, and a thickness, the first upper~~ face exhibits a plurality of auxiliary conductive elements and a plurality of SMD electronic components mounted thereon, and the ~~second lower~~ face exhibits a plurality of electronic components furnished with legs mounted thereon, and the legs pass through the thickness of the laminar support.

5. (original) The apparatus of claim 4, wherein the auxiliary conductive elements are mutually identical.

6. (original) The apparatus of claim 1, wherein the auxiliary conductive element includes a metal pad.

7. (original) The apparatus of claim 1, wherein

the auxiliary conductive element is electrically connected to the conductive track by a solder alloy; and

the auxiliary conductive element includes a metal with high electrical conductivity, and

the auxiliary conductive element is coated with a metallic layer with both high wettability and a melting temperature higher than the melting temperature of the solder alloy.

8. (currently amended) A flexible material strip, comprising:

a plurality of auxiliary conductive elements, each adapted for electrical and mechanical connection to a conductive track formed on a laminar support to thereby increase an effective capacity of the conductive track to carry electrical power; and

a plurality of adjacent recesses formed in the flexible strip, wherein each of the recesses removably houses a respective one of the auxiliary conductive elements; and

wherein the flexible strip comprises a loader strip for a machine for mounting SMD components to the laminar support.

9. (currently amended) The flexible material strip of claim 8, wherein each of the auxiliary conductive elements includes a metal pad.

10. (currently amended) The flexible material strip of claim 8, wherein each auxiliary conductive element comprises ~~is produced from~~ a metal with high electrical conductivity and coated with a metallic layer with both a wettability and a melting temperature sufficient for a soldering process.

11. (new) A printed circuit board comprising:

a laminar support having an upper face and an opposed lower face;
at least one conductive track formed on the upper face of the laminar support;
an auxiliary conductive element electrically connected to the conductive track to thereby increase an effective power capacity of the conductive track;
the auxiliary conductive element further comprising a void therein positioned adjacent to the conductive track; and
the auxiliary conductive element is bonded to the conductive track on the upper face of the laminar support by an adhesive, the adhesive at least partially filling the void in the auxiliary conductive element.

12. (new) The printed circuit board of claim 11 further comprising at least one electrical component mounted on the lower face of the laminar support opposite the auxiliary conductive element, the electrical component electrically connected through the laminar support to the conductive track.